



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,270	02/26/2004	John Dobbs	56230-594 (ANA-246)	5149

7590 05/28/2009  
Toby H. Kusmer  
McDermott, Will & Emery  
28 State Street  
Boston, MA 02109

EXAMINER
----------

NGUYEN, TUYEN T

ART UNIT	PAPER NUMBER
----------	--------------

2832

MAIL DATE	DELIVERY MODE
-----------	---------------

05/28/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/787,270	<b>Applicant(s)</b> DOBBS, JOHN	
	<b>Examiner</b> TUYEN T. NGUYEN	<b>Art Unit</b> 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) 1-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/16/04, 5/3/07</u> .   | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 2832

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of group II, embodiment 2, figures 6A-6C, claims 32-58 in the reply filed on 2/10/2009 is acknowledged. The traversal is on the ground(s) that it is not understood how claims 32-58 are patentably distinct from claims 1-31. This is not found persuasive because claims 1-31 require search and/or consideration in other area or class/subclass. Claims 32-58 will be examined herewith.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 32-58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 32, applicant should clarify the structure/arrangement and configuration of the conductive shielding relative to the primary and secondary magnetic cores.

Regarding claim 33, applicant should clarify the configuration of the conductive shielding *so as to create a substantially continuous conductive path around the axis of rotation.*

Regarding claim 37, there is no antecedent basis for "the conductive shell."

Regarding claims 40 and 55, applicant should clarify the electrical contact between the conductive shell.

Art Unit: 2832

Regarding claim 44, applicant should clarify the structure/arrangement of the conductive shielding relative to the first and second transformer portions.

Regarding claim 49, applicant should clarify the configuration of the conductive shielding *so as to create a substantially continuous conductive path*.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 32 and 44, as best understood in view of the rejection under 35 USC 112 second paragraph, are rejected under 35 U.S.C. 102(b) as being anticipated by Nishino et al. [JP 01-123406].

Nishino et al. discloses a power coupling device comprising:

- a primary transformer portion including a primary magnetic core [7a, 7b] and a primary coil [8a, 8b];
- a secondary transformer portion including a secondary magnetic core [9a, 9b] and a secondary coil [10a, 10b];
- an air gap [figures 1-2] disposed between the primary and secondary transformer portion; and
- at least one conductive shielding [11, 12, note that the diamagnetic material 11, 12 could be copper or superconducting material.]

***Claim Rejections - 35 USC § 103***

Art Unit: 2832

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 32-58, as best understood in view of the rejection under 35 USC 112 second paragraph, are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nishino et al.

Nishino et al. discloses the conductive shielding [11, 12] in the form of conductive shell.

Regarding claims 35-39 and 50-54, the specific of the conductive shell would have been an obvious design consideration based on the intended applications/environments uses.

Regarding claims 41 and 51, the specific thickness of the shell relative to the air gap would have been an obvious design consideration for the purpose of controlling the magnetic flux.

Regarding claims 42-43 and 57-58, the intended use of the power coupling is obvious since a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Regarding claims 40 and 55, Nishino et al. inherently discloses the conductive shells are electrically contact with one another.

### ***Conclusion***

Art Unit: 2832

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN T. NGUYEN whose telephone number is (571)272-1996. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ELVIN ENAD can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TUYEN T NGUYEN/  
Primary Examiner, Art Unit 2832